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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,359	02/14/2001	Housam Maher Al-Housami	3	7805

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EXAMINER	
FERGUSON, KEITH	
ART UNIT	**PAPER NUMBER**
2683	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/782,359	AL-HOUSAMI, HOUSAM MAHER	
	Examiner	Art Unit	
	Keith T. Ferguson	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al. in view of Laakso and Cherpantier et al..

Regarding claim 1, Widegren et al. disloses a wideband mobile radio telecommunication system having a heterogeneous service with different rates (fig. 1, and col. 5 lines 35-67). Widegren et al. differs from claim 1 of the present invention in that it does not disclose a method of resource allocation comprising the steps of determining the current relative proportions of traffic of each rate traffic in telecommunication

cell; and applying a threshold to the loading level in said cell, the threshold being dependent upon the determined relative proportion. Laakso teaches a method of resource allocation (paragraph 0010 line 1 through paragraph 0016 line 18) comprising the steps of determining the current relation proportions (i.e. the load originates from real time users and load attributable to non real time users) (paragraph 0010 line 1 through paragraph 0016 line 18 and paragraphs 0072 line 1 through paragraph 0083 line 8) of traffic of each rate (load) traffic in telecommunication cell (paragraph 0010 line 1 through paragraph 0016 line 18 and paragraphs 0072 line 1 through paragraph 0083 line 8). Cherpantier et al. teaches applying a threshold to the loading level in said cell, the threshold being dependent upon the determined relative proportion (col. 4 lines 22-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Widegren et al. with a method of resource allocation comprising the steps of determining the current relative proportions of traffic of each rate traffic in telecommunication cell; and applying a threshold to the loading level in said cell, the threshold being dependent upon the determined relative proportion in order to provide quality channels within a cell of system by transmitting a power

control to help reduce interference between mobile stations and to manage traffic loads within the cell to provide clearer channels to multiple users, as taught by Laakso, and Cherpantier et al..

Regarding claims 2-7, the combination of Widegren et al. and Cherpantier et al. differs from claims 2-7 of the claimed invention in that it do not disclose the proportion of the high rate users is determined/performed in a base transceiver from a received signal strength which is sent to a central radio network controller and a variable threshold is allocated to each cell by the radio network controller and the radio network controller maintains a table of threshold values for specific mixes of service and selects a threshold for a cell so as to maintain optimum network operation. Laakso teaches the proportion of the high rate users is determined/performed in a base transceiver from a received signal strength (paragraph 0036 and 0060) which is sent to a central radio network controller (paragraph 0062) and a variable threshold (second load value can be equal to higher load value) is allocated to each cell by the radio network controller (paragraph 0061 and 0062) and the radio network controller maintains a table of threshold values for specific mixes of service and selects a threshold for a cell so as to maintain optimum network operation (paragraph 0062).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Widegren et al. and Cherpantier et al. with the proportion of the high rate users is determined/performed in a base transceiver from a received signal strength which is sent to a central radio network controller and a variable threshold is allocated to each cell by the radio network controller and the radio network controller maintains a table of threshold values for specific mixes of service and selects a threshold for a cell so as to maintain optimum network operation in order to control uplink interference within a cell of a system that has wide bandwidth and to be able to manage traffic loads within the cell and surrounding cell/sectors, as taught by Laakso.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al. in view of Rikken et al., Laakso and Cherpantier et al. and Affes et al., newly recited reference.

Regarding claims 8 and 9, Widegren et al. discloses wideband mobile radio telecommunication system (UMTS) comprising core network and a plurality of RNC and controlling a plurality of base transceiver stations (fig. 1 number 16,24,26 and 28); Widegren et al. differs from claims 8 and 9 of the present

invention in that it do not disclose each base transceiver arranged to determine intermittently the relative proportions of traffic of each rate in a cell; to apply a variable threshold to the loading level in the cell; the variable threshold being dependent upon the determined proportions and there being traffic of various rates. Rikken et al. teaches each base transceiver arranged to determine intermittently the relative proportions (load condition) of traffic of each rate in a cell (col. 4 lines 4-10 and col. 7 lines 35-47). Laakso teaches to apply a variable threshold (second load control equal or higher than first load control) to the loading level in the cell (paragraph 0060 and 0061) and the base transceiver is arrange to send the radio network controller (radio network planner) a signal indicating a relative proportions and receive from radio network controller a variable loading limit to be applied (i.e. the load originates from real time users and load attributable to non real time users) (paragraph 0010 line 1 through paragraph 0016 line 18, paragraph 0061 and 0062 and paragraphs 0072 line 1 through paragraph 0083 line 8). Cherpantier et al. teaches the variable threshold being dependent upon the determined relative proportions (col. 4 lines 22-28). Affes et al. teaches a cell that have traffic of various rates based upon signal strengths from mobile stations (paragraph 0152).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Widegren et al. with each base transceiver arranged to determine intermittently the relative proportions of traffic of each rate in a cell; to apply a variable threshold to the loading level in the cell; the variable threshold being dependent upon the determined relative proportions and there being traffic of various rates in order to control uplink interference within a cell of system that has wide bandwidth and to be able to manage traffic loads within the cell based upon the mobile stations signal strengths within cell/sectors, as taught by Rikken et al. and Laakso.

Response to Arguments

4. Applicant's arguments filed July 16, 2004 have been fully considered but they are not deemed to be persuasive. The following are explanations to the applicant arguments:

Argument: Regarding claim 1, applicant alleges that the combination of Widegren et al., Laakso and Cherpantier et al. does not disclose or suggest a wideband mobile radio telecommunication system having heterogeneous services with "different rates".

Explanation: Examiner agrees with applicant. However, in claim 1, the preamble of the claim does not hold patentability weight

when granting a patent and the examiner cannot give patentability to the claim based upon the preamble.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson
Art Unit 2683
October 21, 2004